

Appl. S.N. 09/839,940
Amdt. Dated January 26, 2004
Reply to Office Action of October 24, 2003

RD-29,211

REMARKS

This amendment is responsive to the Office Action mailed October 24, 2003 and is accompanied by a Request for Continued Examination (RCE) under 37 CFR 1.114. In the Office Action, claims 1-8 and 10-17 were rejected under 35 USC 102(e) as being unpatentable by Fujita et al. (US Patent 6,169,401) and claim 9 was rejected under 35 USC 103(a) as being unpatentable over Fujita et al in view of Eberler et al (US Patent 6,232,548). In this amendment, claims 1 and 11 were amended and claim 14 was canceled. No new matter has been added.

Claims 1-13 and 15-17 remain pending in this application. Reconsideration in light of the above amendments and the following remarks is respectfully requested.

The rejection of claims 1-8 and 10-17 over the Fujita reference are respectfully traversed. Independent claims 1 and 11 have been amended to each recite a whole-body radio frequency (RF) coil assembly adapted to resonate at substantially high frequencies, the RF coil assembly having a plurality of conductors of selected length and selected width to minimize inductance and a plurality of capacitive elements for electrically interconnecting the conductors and wherein the conductors and capacitive elements form a conductive loop for producing an RF field in the MRI system for imaging. The amendment is supported in the specification at, for example, paragraph 15. "Anticipation requires the disclosure in a single prior art reference of each element of the claim under construction." W.L. Gore & Associates v. Garlock, Inc. 220 USPQ 303, 313 (Fed. Cir. 1983). The Fujita reference does not disclose each element of the present invention as claimed in independent claims 1 and 11. Specifically, the Fujita reference does not show or suggest Applicants' whole-body RF coil comprising conductors and capacitive elements forming a conductive loop for producing an RF field in the MRI system. The Fujita reference merely discloses a quadrature highpass RF surface coil assembly for use in transmitting or receiving signals for use in imaging. Nowhere does the Fujita reference show, disclose or teach a whole-coil RF coil including Applicants recited conductors of selected width and capacitive elements for producing the RF field in the MRI system for imaging. The surface coil of the Fujita reference is incapable of producing a RF field in the MRI system and is distinguishable from an RF coil that creates an excitation frequency in the MRI system. Thus, Applicants respectfully submit that the Fujita reference does not show or disclose each element of Applicants' present invention, as claimed in independent claims 1 and 11, particularly as amended. Therefore, Applicants' claimed invention is not anticipated by the Fujita reference. Claims 2-10 and 12-13 and 15-17 depend directly or indirectly from claims 1 and 11 and therefore are similarly allowable. Applicants respectfully request withdrawal of the rejection under 35 USC 102(e).

The rejection of claim 9 under 35 USC 103(a) over the Fujita and Eberler references is respectfully traversed. With respect to claim 9, Applicants respectfully submit that the Fujita and Eberler references do not disclose, suggest or teach the RF coil assembly having conductors

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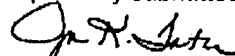
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having segmented slots for reducing eddy currents induced by the gradient coils of the MRI system. For reasons stated with reference to the rejection under 35 USC 102, Applicants submit claim 1, from which claim 9, depends is patentable over the Fujita reference in that the Fujita reference does not show, suggest or disclose Applicants' recited invention. The Eberler reference does not overcome the deficiencies of the Fujita reference in that it does not teach, show or disclose Applicants' recited RF coil assembly for producing an RF field in the MRI system for imaging, therefore the combination of the Fujita and Eberler references do not teach or suggest Applicants' invention as claimed in independent claim 1. The Eberler reference merely teaches a RF shield which is arranged between a gradient coil and a whole-body RF antenna and in one embodiment, the reference teaches slots in the shield. Thus, nowhere does the Eberler reference show or disclose Applicants' recited segmented slots in the conductors of a RF coil assembly as claimed in claim 9. Applicants respectfully submit that no reasonable combination of the Fujita and Eberler references, taken alone or in combination, would obtain Applicants' recited invention in claim 9. Applicants respectfully submit that the invention as recited in claim 9 is not obvious and is further allowable by dependency from claim 1 as discussed with reference to the rejection under 35 USC 102(e). Withdrawal of the rejection of claim 9 under 35 USC 103(a) is respectfully solicited.

In view of the foregoing amendment and for the reasons set out above, Applicants respectfully submit that the application is in condition for allowance. Favorable reconsideration and prompt allowance of the application are respectfully requested.

Should the Examiner believe that anything further is needed to place the application in condition for allowance, the Examiner is requested to contact Applicants' undersigned representative at the telephone number below.

Respectfully submitted,


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Attachments: RCE Transmittal